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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,924	10/18/2004	David Johnson	128905-1002 (HAM 830004)	8925
62067	7590	11/15/2006	EXAMINER	
HUNTSMAN ADVANCED MATERIALS AMERICAS INC. LEGAL DEPARTMENT 10003 WOODLOCH FOREST DRIVE THE WOODLANDS, TX 77380			FIGUEROA, JOHN J	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,924

Applicant(s)

JOHNSON ET AL.

Examiner

John J. Figueroa

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-49 is/are pending in the application.
- 4a) Of the above claim(s) 45-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 30-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions that are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 30-44, drawn to a photocurable composition.

Group II, claims 45-49, drawn to a method for producing a solidified 3-D object.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature is the photocurable composition containing the photocurable monomer reactive particles and photoinitiator but is neither novel nor has an inventive step as evidenced by United States Patent Application Publication Number 2002/0132872 A1 to Yamamura, hereinafter 'Yamamura' (discussed below).

3. During a telephone conversation with Mr. Robert Holthus on September 23, 2006 a provisional election was made with traverse to prosecute the invention of Group I, claims 30-44. Affirmation of this election must be made by applicant in replying to this

Art Unit: 1712

Office action. Claims 45-49 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 30-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamura.

Yamamura discloses a photocurable resin composition for photofabrication of three-dimensional objects, that exhibits superior photocurability to various light sources such as a laser and a UV lamp and that can produce a cured three-dimensional object

Art Unit: 1712

exhibiting superior folding endurance, said photocurable resin composition comprising: 5-80 parts by weight of an oxetane compound; 5-80 parts by weight of an epoxy compound; a photoacid generator; elastomer particles with an average particle diameter of 10-700 nm (0.01 to 0.7 μm); a polyol compound; an ethylenically unsaturated monomer, and 0-10 parts by weight of a radical photopolymerization initiator. (Abstract; page 1, [0001]); claim 1 on page 14; page 7, [0078]; page 10, [0105] to [0108]; page 10, [0113])

Yamamura further discloses the oxetane component to be crosslinked and contain a linear or branched polysiloxane group that can be a dimethylsiloxane (Page 2, [0021]; page 3, [0033] to page 4, [0036]); the epoxy to be, e.g., an epoxycyclohexyl group or a glycidyl group-containing epoxide and further be polymerized (Page 5, [0051] to page 6, [0060]); the photoacid generator to initiate cationic polymerization and can be an onium salt (page 6, [0062] to page 7, [0070]); the elastomer particles to be core-shell type particles that can comprise, e.g. a polybutadiene or a methacrylate copolymer, that can be crosslinked (page 7, [0073] to page 8, [0076]; and the ethylenically unsaturated monomer to comprise, e.g., a methacrylate copolymer (page 8, [0092] to page 9, [0098].

Yamamura also discloses that the photocurable composition can be produced by mixing and selectively irradiating said composition by various means (such as a laser beam or focused ray converged by a lens or mirror, or instead using a mask) to form the polymer matrix. (Page 10, [0116] to [0117]) Because Yamamura and the instant claims encompass the same reactive particles and photocurable resin composition comprising thereof, then the composition disclosed by Yamamura and that encompassed by the

Art Unit: 1712

instant claims must inherently possess the same physical properties, such as the reactive particles reacting completely to form chemical bonds to a formed polymer matrix.

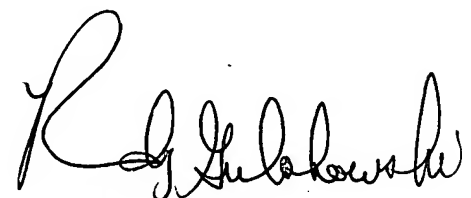
Thus, the instant claims are anticipated by Yamamura.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Mon-Thurs & alt. Fri 8:00-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Art Unit: 1712

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG